the Congressional increases, and they say that the studies show that the money is being well used and there are still many worthwhile projects which could not be supported in past years even with the increased funds Congress had made available.

Agricultural Research

A curious effort was begun last week to work out a compromise between two widely different bills to promote more research on finding industrial uses for agricultural products. Once again this has been endorsed by both Kennedy and Nixon. It is talked of as a way to help solve the problem of farm surpluses. In fact, though, not many people see much hope in it, certainly not the Department of Agriculture, which says the nearly $15–20 million a year it is spending is all that can be usefully used because of the limited number of promising possibilities. Whether this is true or not, it is still a politically appealing idea for a candidate to point out that the amount of money we are spending to find new uses for farm products is trivial compared with the $6 billion a year the government spends on agriculture. Both candidates are making this argument.

In 1959 the Senate, goaded by Hubert Humphrey, who is one of the few people who really professes to see a solution to the farm problem, pushed through a bill to increase support of what is called "utilization research" by organizing a separate Bureau of Utilization Research within the Department of Agriculture. The House agricultural committee, in response, produced a bill backed by the Administration to set up a commission to study the possibilities of an increased program of utilization research. Such commissions are generally created when there is a great popular demand to do something about something you think nothing can or should be done about. Thus there was an enormous gap between the Humphrey Senate bill and the House bill. The conferees for more than a year never even bothered to hold a meeting since there was really no basis for compromise between a bill that was intended to push the Administration toward a big multi-million dollar program and a bill to set up a commission to study things. The House agriculture committee, backed by the Administration, said it had no intention of going for the Senate scheme and the Senate said the House bill wasn't worth passing.

Last week the conferees decided to get together after all. By the beginning of the week they were still holding to their widely separated positions, but still talking of some sort of agreement. But whether there is an agreement or not won't make much difference to anyone except to legislators running for re-election. The new president and the new Secretary of Agriculture will set up a bigger utilization research program, if they decide it is really worth while, and the existence or nonexistence of the study commission won't make much difference one way or the other. Neither, for that matter would the existence or nonexistence of the bureau for utilization research talked of in the Senate bill. Congress, through its control over the purse strings, can tell the President what he cannot do; but it cannot make him do what he chooses not to do.—H.M.

News Notes

Brode Resigns as State Department Science Adviser; Whitman Named Successor

Wallace R. Brode has resigned, effective 6 September, as science adviser to the Secretary of State, and Walter G. Whitman, formerly chairman of the department of chemical engineering of Massachusetts Institute of Technology, has been named his successor. Brode, who has a long record of government service with various scientific agencies, has served as science adviser since January 1958. He will be on retirement status under Civil Service.

The science program in the Department of State dates back to 1951, when a number of science attachés at posts abroad were first appointed. After the science adviser resigned in 1954 no replacement was appointed, and the program abroad lapsed until it was revived by Secretary of State Dulles in 1957. During his tenure as science adviser, Brode revitalized the entire science attaché program. Ten embassies abroad have been staffed with science attachés, many of whom cover a number of countries on a regional basis. The attachés facilitate scientific exchanges and interpret American science abroad. They also advise other members of the embassy staffs on matters involving scientific and technical factors.

On leaving government service, Brode stressed the value to the country of scientists and science-administrators who make their careers in the government, and the need for the government to work out long-term staffing policies for such scientists. He noted that tours of government duty by scientists from industry or the academic community are also important, but he added that it takes time to develop an understanding of governmental problems and procedures. In his own work in reactivating the science attaché program, Brode said, he had made a point of selecting, for at least some of the overseas posts, scientists who were making their careers in the government. Brode also expressed the hope that the present administration and the administration that takes office early next year will give continuing, nonpolitical support to the attaché program.

Whitman, who is succeeding Brode as science adviser, served with the National Advisory Commission for Aeronautics from 1940 to 1945; was the director of the Lexington Project of the AEC in 1948; and also served as conference secretary-general for the U.N. Conference on the Peaceful Uses of Atomic Energy, in 1955. He also served as chairman of the Research and Development Board of the Department of Defense from 1951 to 1953 and was a member of the National Advisory Commission for Aeronautics during the same two years. He is on terminal leave from Massachusetts Institute of Technology.

Mary E. Corning, special assistant to Brode, is leaving the State Department to go to the National Science Foundation, where she will be project director in the planning group of the associate director for education and international activities.

Live Poliovirus Vaccine Approved; Worldwide Trials Reported

Live poliomyelitis vaccine has been approved by the Public Health Service as suitable for use in the United States. The vaccine, which is taken by mouth, will go into commercial production by next spring, and large supplies are expected to be available in the fall of 1961.

The PHS will permit initial commercial production of only Sabin types of vaccine—types I, II, and III—developed by Albert B. Sabin of Cincinnati to protect against the three strains

of poliomyelitis. Two other live virus vaccines were not approved for commercial production—the vaccine developed by Herald R. Cox at the Lederle Laboratories in Pearl River, N.Y., and the vaccine developed by Hilary Koprowski at the Wistar Institute in Philadelphia.

Surgeon General Leroy Burney praised both men for their "great contributions." He said that large-scale field trials of both the Cox and Koprowski vaccines had shown "the hazards to man to be very, very slight." But he pointed out that the Public Health Service had to apply a monkey test for safety in licensing a vaccine, and that the Sabin strains showed least virulence when injected into the brains, spinal cords, and muscles of monkeys. Since the Sabin strains were developed with funds furnished by the National Foundation, they will be available to all the drug manufacturers that wish to produce live poliomyelitis vaccine.

Reports from Around the World

Never before has a vaccine been subjected to such searching, rigorous, and widespread investigation. In July the World Health Organization, which has been active in the field for some years, sponsored an International Poliovirus Conference in Washington that was attended by 100 scientists from 20 countries. The conference examined more than 40 detailed reports of laboratory experiments, field trials, and massive campaigns.

Soviet scientists reported on the administration of Sabin vaccine, Soviet-tested and mass-produced, to 66 million people—a figure that by the end of 1960 will rise to 75 million in the Soviet Union alone. In addition, supplies of the vaccine will be sent to Czechoslovakia, Hungary, Bulgaria, China, and Vietnam.

Poland, using the Koprowski vaccine, has embarked on compulsory vaccination of all individuals within the age group of susceptibility.

In Latin America, the Cox vaccine has been given to millions of people under tropical and potentially epidemic conditions.

Whole communities in the United State have been given live viruses by mouth.

As the conference agreed, "In almost all these trials, including the massive experience in the U.S.S.R., untoward reactions were either absent or insignificant, and the so-called major illness of poliomyelitis had neither directly nor indirectly been induced by infection with attenuated poliovirus used as vaccine, nor from its spread in the local community."

The majority of the world's inhabitants cannot afford vaccination by injection, or they lack the professional manpower needed to give the injections; but safe live vaccine could be easily dispensed to hundreds of millions of people and could completely eradicate poliomyelitis.

Geneva Talks Adjourn

The East-West nuclear test suspension talks in Geneva started a 5-week recess on 23 August. The talks, which have been going on for almost 2 years, have resulted in a cessation of tests but not in international control.

However, the delegates have reached agreement on the outline and at least some of the details of a control and inspection system in support of a treaty which would prohibit all nuclear tests except small-scale underground explosions. Even these small-scale tests would be suspended temporarily until an international research program could improve methods of identifying them. There are important disagreements to be settled in all the major aspects of the negotiations, and in recent weeks the talks have reached an impasse.

Officially, the recess is to provide a vacation period for delegates and staff members. Actually, the United States and Britain have agreed that further progress is impossible at this time, unless there should be some unforeseen Soviet concession. And this is extremely unlikely, for there is a widespread conviction that treaty negotiations with the Soviet Union will be deadlocked during the balance of the Eisenhower Administration.

It has been reported that United States and British officials have met to assure one another that no nuclear tests of any kind will be conducted for an unannounced period, but certainly a period that will extend until after the election. This news is supported by a report that at a recent National Security Council meeting the President refused to permit the Atomic Energy Commission to proceed with a series of scheduled underground nuclear explosions to help perfect a detection system.

Pauling Loses Initial Court Action

Nobel Prize winner Linus Pauling of the California Institute of Technology has failed in his appeal to the Federal District Court in Washington, D.C., for help in opposing an order from the Senate Internal Security Subcommittee which demands that he name, by 15 September, the scientists who assisted him in 1958 in circulating a petition against nuclear tests. He refuses to identify his assistants on the grounds that it might expose them to job loss and harassment.

Pauling holds that the order forcing him to provide the names infringes on his constitutional rights to freedom of speech and conscience and to protection from unreasonable search and seizure. He asked the court for an injunction enjoining the committee from making the demand, and for a declaratory judgment describing his "rights and duties" in connection with the committee.

The attorney for the government argued that support of Pauling's stand "would be the death of any effective legislation and a gross violation of the separation of powers." He pointed out that Pauling had not yet been cited for contempt of Congress and might not be.

The court ruled, on 23 August, that the Senate order "is not subject to judicial review" at this time, indicating that intervention in the case was inappropriate until Pauling had actually been charged with violation of the law, since the court did not have authority to govern a congressional committee. Pauling's attorney, A. L. Wirin, an American Civil Liberties Union lawyer, holds that the courts have the right to rule on all branches of government. The case is now before the United States Court of Appeals.

Interest in Keating Bill Aroused

Pauling says that he prefers to have the matter considered "before the event, rather than to be indicted and sentenced to prison, and then take it to the courts."

"Any responsible congressional body ought to share this preference," says a recent editorial in the Washington (D.C.) *Post*, which discusses a bill that Senator Kenneth Keating (R-N.Y.) has been promoting for the past 5 years. The bill, S.1515, is described as a method by which the houses of Congress and their committees may

invoke the aid of the courts in compelling the testimony of witnesses. Introduced in March 1959, it is now before the Senate Judiciary Committee.

The measure provides that congressional committees, instead of determining for themselves what constitutes contempt, would apply to a District Court for an order requiring a witness to show that the question he objected to was improper. If the court ruled that he must answer and if he still refused, then he would be held in contempt of court, and sentenced accordingly if the higher courts upheld the decision after he had exercised his right to appeal. Thus, the courts would make the determination of contempt at the outset, rather than after a witness had been indicted and subjected to trial for the crime of contempt of Congress.

Washington University Group Analyzes Project Plowshare for St. Louis Citizens' Committee

An analysis of Project Plowshare, the Atomic Energy Commission's program for the peaceful utilization of underground nuclear explosions, has been prepared by a team of Washington University scientists and released by the Greater St. Louis Citizens' Committee for Nuclear Information (CNI). The main conclusions are that while some of the scientific experiments included in the project may yield important results, a number of the proposed engineering plans could probably be carried out more effectively by non-nuclear techniques, and others appear wholly impractical.

The value of Project Plowshare is controversial. A series of explosions is proposed to carry out a variety of engineering and scientific experiments ranging from studies of the behavior of neutrons to blasting out a harbor in Alaska with nuclear explosives. Although active plans for a number of projects are being made, no projects have been carried out as yet.

Proponents of the project have argued that the proposed underground blasts are needed to advance knowledge of certain scientific areas and to give engineers a better idea of how the force of nuclear explosions can be harnessed for earth moving, power production, and improvements in mining.

Those opposing the project say its chief effect will be to complicate the problem of reaching an agreement to halt nuclear tests. For example, Henry D. Smyth of Princeton University recently told a Congressional hearing: "Congress should consider very carefully whether the use of nuclear explosions for peaceful purposes will jeopardize our efforts at international control. Virtuous assurances that such explosions are not being used for weapon development will simply not be believed." Smyth was a member of the war-time atomic bomb project and author of its first public report. He was also the first scientific member of the Atomic Energy Commission.

In two current issues of *Nuclear Information*, published by CNI, a group of physicists and chemists analyzed, on the basis of AEC reports, the scientific and technological gains which might be expected from the proposed explosions. Their conclusions may be summarized as follows.

Alaskan Harbor Project

One of the chief projects, called Chariot, is a proposal to make a harbor far up on the Alaska coast by setting off three underground nuclear explosions.

The only advantage of nuclear explosives is that they are considerably cheaper than conventional explosives for very large projects such as the proposed Alaska harbor.

The economic advantage of nuclear explosives is offset by these difficulties: radioactive contamination of the air and nearby ground from fallout produced by the explosion; possible contamination of groundwater; shock damage extending to distant buildings; and absence of adequate theories for predicting the size of the hole produced by the explosion.

It is not yet clear from AEC studies to what extent fallout would affect the animals of the area and so influence the livelihood of the Eskimos. Although there are no towns within 30 miles of the site of the proposed harbor, the Eskimos of the region use as their hunting land a large area that would be affected by fallout.

The CNI report states, "Alaska officials, some hunting guides, and the people of the two Eskimo villages closest to the site of the proposed harbor have expressed concern over the possible effects of the explosion on living conditions." The report also quotes the AEC, which stated, "An experiment would be conducted only after the Commission is assured that public health and safety will be protected."

With the present difficulties in evaluating the possible harmful effects of the proposed harbor blasts, the scientists conclude, "large earth-moving nuclear explosions in the populated areas where they are needed are risky and probably impossible for a long time to come."

Underground Explosions for Power

Using underground nuclear explosions to produce a large reservoir of heat to be converted into steam and finally into electric power is another much-discussed Plowshare proposal.

In a recent Congressional hearing, a project spokesman pointed out that the method might reduce fuel costs for electric power to 30 percent of the present average level in the United States. The CNI analysis of AEC data shows, in contrast, that the cost of electric power produced by the proposed underground explosions would actually be greater than the cost of conventionally produced electricity. The additional expense results from the difficulties in reusing the site of an explosion, and from the special systems required to prevent radioactive contamination of the power generators and the earth's surface.

The additional factor of earth shock, described by the scientists, means that a power plant could not be located near the site of the explosion and that steam generated by the explosion would have to be conducted over prohibitively long distances to an off-site power plant. Earth shock from 10- and 100-megaton explosions, which have been suggested as a means of producing power economically, would cause damaging earthquakes as far as 40 and 100 miles away from the site. (The explosion of even a small, 1-megaton device, which would be uneconomical, would produce damaging forces 20 miles away.)

Mining Radioisotopes from Debris

Another featured part of Project Plowshare is the scheme to mine useful radioisotopes from the debris produced by underground explosions. A nuclear explosion produces, as fission products, many radioisotopes which can then be extracted from the debris. The CNI analysis points out that such radioisotopes are already being produced overabundantly by nuclear reactors, and in fact represent a serious disposal problem.

Certain other radioisotopes are not easily produced in reactors but are copiously formed in nuclear explosions. Such isotopes, for example cobalt-60, might be usefully mined from the debris of an

underground explosion. The CNI report points out, however, that the economic and technical difficulties would be formidable, and that it would probably be simpler in the end to produce these substances in nuclear reactors.

There are some radioisotopes that can be produced only by means of nuclear explosions, and in this case, the CNI report states, "nuclear explosions have a clear and definite advantage."

The scientists conclude, "production and recovery of technologically useful quantities of radioactive materials could not reasonably be advanced as the sole reason for conducting a contained nuclear explosion."

Neutron Study

A purely scientific part of Project Plowshare is the proposal to study the behavior of neutrons produced in an underground explosion by guiding them through a long, evacuated pipe into underground test and recording instruments. These experiments, according to the CNI analysis, could not possibly be done by any means other than a nuclear explosion. While neutron experiments can be carried out with reactors and particle accelerators, the numbers of neutrons available from such apparatus is so limited as to make it impossible to make certain precise measurements. If a nuclear explosion were used, however, the experiment would be so expensive that it might not be justified in the absence of other uses for the explosion.

Scientists Who Prepared the Analysis

The Washington University scientists who analyzed the Plowshare program are Christoph Hohenemser, graduate student in the department of physics and coauthor of a report on nuclear disarmament, *The Nth Country Problem: a World-Wide Survey of Nuclear Weapons Capabilities,* published by the American Academy of Arts and Sciences; Brian Pate, associate professor of chemistry and a specialist in the chemistry of radioisotopes; and Franklin B. Shull, associate professor of physics, who specializes in the physics of atomic particles. Irving Kaplan, instructor in sociology, assisted with the problem of the possible effects of the proposed Alaska harbor on the life of Eskimos.

The Committee for Nuclear Information is an organization of scientists and other citizens devoted to the promotion of public knowledge and understanding of nuclear problems. The committee assembles and studies technical information, and makes the facts known to the public through its bulletins and speakers bureau. The committee also sponsors the Baby Tooth Survey.

New List of Paperbound Science Books Prepared by AAAS Library Program

The AAAS Science Library Program has released a new edition of *An Inexpensive Science Library*, a selected list of paperbound science books. This fourth edition, 70 pages long, was prepared by Hilary Deason, director of the Library Program, and Robert Lynn. It names and describes some 500 paperbound books, about 100 more than last year.

Each title is classified as to degree of difficulty, from a rating of (1) for material suitable for the upper elementary grades and junior high school through a rating of (4) for books that are primarily for the professional specialist. All the major basic sciences and mathematics are represented.

The books listed may be purchased from the publishers, whose names and addresses are given at the back of the booklet, or from the selected retail dealers also given.

The Science Library Program, which is supported by the National Science Foundation, issues the list as an educational service. Copies may be obtained from the AAAS for 25 cents each, prepaid; postage stamps are not accepted. Prepaid orders for 25 or more copies will receive a discount of 33⅓ percent.

Consulting Group in High-Pressure Techniques Being Formed

A consulting group of scientists and engineers with experience in high-pressure techniques is being formed as the result of a meeting held last fall under the auspices of Autoclave Engineers, Inc. One of the purposes of the group, to be known as High Pressure Associates, will be to offer consulting services to any organization or individual in the general field of high pressure. Other objectives envisaged are the initiation of standards for pressure work and the preparation of a handbook of safety measures.

For the present, a relatively loose organization is planned, with one man acting as chairman to establish a central clearing house. Those interested in making use of the service should write to the chairman, Professor Barnett F. Dodge of Yale University, stating their problem, and the latter will put the questioner in contact with whichever member of the Associates he believed most competent to give assistance on the particular problem. From then on client and consultant must negotiate to establish the conditions under which work will be done or advice offered. Briefly, the chief idea is to facilitate the bringing together of those with experience in the rapidly growing field of high-pressure applications and those who are seeking help on problems.

Anyone who is interested and believes himself qualified is invited to correspond with the chairman for the purpose of discussing the conditions of membership. The main qualification for membership is experience in some field of application of high-pressure techniques. Men employed by companies manufacturing or supplying high-pressure equipment are not eligible.

Chicago Institute Launches Program To Save Egyptian Antiquities

The first expedition to save the Nubian monuments from Nile flood waters will leave for Egypt this October from the Oriental Institute of the University of Chicago. The group has elected to work at Beit el-Wali, one of the first sites to be submerged by the lake which will form behind the Aswan High Dam. Beit el-Wali is 30 miles south of the dam begun this year by the United Arab Republic.

Keith C. Seele, Egyptologist and program director of the Oriental Institute's Egyptian Aswan High Dam Program, has appealed for contributions from the public to support the expedition, which will (i) photograph and copy for publication the important historical records and beautifully painted reliefs of the rock-hewn temple of Rameses II (1304–1238 B.C.), and (ii) explore a 12-mile stretch to the north of the temple on both sides of the Nile, excavating and recording everything of value left there by the long succession of peoples who lived in the Nubian valley.

The plan to lead an expedition into Nubia already had been approved by the University of Chicago before an official appeal was issued in March by the United Nations Educational, Scientific, and Cultural Organization. At

that time, UNESCO invited international cooperation to save 21 temples and numerous unexcavated sites in the 300-mile stretch from Aswan in the United Arab Republic to the Third Cataract in the Sudan.

The Oriental Institute has scheduled a 5-year program of exploration, excavation, and recording of antiquities. However, the copying of the Beit el-Wali temple must be completed by the 1962–63 season, after which the site will be permanently submerged. The temple is to be moved to higher ground, but it is possible that the reliefs and inscriptions will be damaged. The institute wants to complete its project before such damage can occur.

News Briefs

Social aspects of science. A program on the "Social Aspects of Science," based on a recent report of the AAAS Committee on Science in the Promotion of Human Welfare [*Science* **131**, 68 (8 July)] was broadcast yesterday over radio station WBAI in New York. T. C. Byerly of the Agricultural Research Service, a member of the AAAS committee, was interviewed by three Washington, D.C., newsmen—Alfred Friendly of the *Post*, William Hinds of the *Evening Star*, and Tony Sylvester of station WTOP. They discussed the meaning of the committee report, which calls on all scientists to take an active role in the resolution of the problem of control of nuclear energy, disarmament, population control, and the use of scientific research as a weapon in the cold war. The program was originally recorded by WTOP.

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Zoonoses research center. A center for Zoonoses Research is to be established in the College of Veterinary Medicine at the University of Illinois. The zoonoses are being increasingly recognized as of major importance to human and animal health and welfare. Establishment of the center—the second one in the world and the only one in the United States—is expected to focus more attention on the zoonoses, encourage research, and promote needed interdisciplinary cooperation and coordination.

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Olsen Memorial Fund. In July biochemist Norman Olsen and his wife and two children died in a fire in their home. Olsen, who had previously taught at several universities, was assistant director of the Masonic Research Laboratory in Utica, N.Y. Friends are founding an Olsen Memorial Fund, the proceeds of which will be used to provide scholarship awards to deserving students in the field of biological science. Those who wish to contribute may send checks, made out to the fund, to Dr. Gordon K. Moe, Director, Masonic Medical Research Laboratory, Utica 2, N.Y.

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World's foresters meet. Foresters from 71 nations, including 700 foreign participants, are in Seattle, Wash., for the Fifth World Forestry Congress, which began on 29 August. The 13-day congress is expected to have an attendance of 2000 and to be the largest such international gathering ever held. This fifth World Forestry Congress is the first for which the United States has been host. Preparations, made in collaboration with the Food and Agriculture Organization of the United Nations, were the responsibility of an organizing committee appointed by the Secretary of State and headed by Richard E. McArdle, head of the U.S. Forest Service.

Scientists in the News

Maurice Ewing, director of the Lamont Geological Observatory of Columbia University, has been awarded the John Fleming Medal of the American Institute of Geonomy and Natural Resources. The citation read during the presentation ceremony at the Woods Hole Oceanographic Institution noted that Ewing's contributions to the earth sciences, both in research and in the development of instruments for research, are "of unique value to humanity in bringing knowledge about the oceans."

John H. Marshall, associate physicist with the Radiological Physics Division of Argonne National Laboratory, Argonne, Ill., has accepted a 1-year assignment to conduct research at the Royal National Orthopedic Hospital, London, England. With Hubert A. Sissons, Marshall will study the bone-damaging effects of radiation in animals. He will also visit other laboratories, in England and in Belgium, where scientists are studying radiation damage to bone. The studies are part of a world-wide scientific effort to determine the effects of nuclear radiation on animals and man.

Sister **Hilary Ross**, a biochemist internationally known for her laboratory research on leprosy, was recently honored by Surgeon General Leroy E. Burney of the Public Health Service on the occasion of her retirement after 37 years of duty at the national leprosarium, officially known as the U.S. Public Health Service Hospital, Carville, La. Sister Hilary was presented with a certificate citing her outstanding contribution to the care and welfare of leprosy patients and her dedicated effort in developing and communicating new knowledge about the disease. Sister Hilary is leaving for Japan to organize ancillary medical services in a crippled children's hospital now under construction.

Joshua A. Fishman, formerly associate professor of human relations and psychology at the University of Pennsylvania, has been appointed dean and professor of psychology at Yeshiva University's Graduate School of Education. While serving as dean he will continue to be principal investigator of a 2-year project designed to determine the language resources of American ethnic groups. This project is sponsored by the Language Development Section of the U.S. Office of Education.

Horace W. Lundberg, for the past 7 years associate professor in the Graduate School of Social Work at the University of Utah, has been appointed to the new position of specialist in school social work services (visiting teachers) at the U.S. Office of Education, Washington, D.C.

Sverre Petterssen, professor of meteorology at the University of Chicago, has been appointed chairman of the university's department of meteorology, effective 1 October. He succeeds **Horace Byers**, professor of meteorology who has been department chairman since 1947. Byers is relinquishing the chairmanship to devote more time to research and teaching.

Harold S. Ginsberg, associate professor of preventive medicine at Western Reserve University since 1951, has been named professor and chairman of the department of microbiology at the University of Pennsylvania School of Medicine. The department chairmanship was formerly held by **Stuart Mudd**, now emeritus professor of microbiology.

Michael Amrine, of Washington, D.C., and New York, science writer, has joined the staff of the U.S. Science Exhibit for the Century 21 Exposition, which will be held from 21 April to 21 October 1962 in Seattle, Wash. Amrine will conduct a nation-wide survey in order to report exhibitable scientific ideas. He will make extensive contacts in the scientific community—in universities, industries, federal agencies, and research centers—so that his recommendations will be based on current scientific activity.

John Swallow, an oceanographer with the National Institute of Oceanography in England, received the third Alabatross Award of the American Miscellaneous Society during the recent meetings of the UGGI in Helsinki, Finland. The award is given annually for the most unusual contribution in oceanography. Swallow's contribution was the measurement of underwater currents.

John B. Youmans has been named director of the American Medical Association's Division of Scientific Activities, which was created in 1959 to coordinate all scientific activities of the association. He succeeds the late Edward L. Turner. At present, Youmans is technical director of research for the U.S. Army Medical Research and Development Command, Office of the Surgeon General, in Washington. He will assume his new position full time in October.

The Atomic Energy Commission has presented its Distinguished Service Award to **Kenner F. Hertford**, manager of the commission's Albuquerque Operations, and to **Theodore Rockwell, III**, technical director of the Naval Reactors Program for both the commission and the Department of the Navy. The gold medal award is the highest recognition that the commission can bestow on its employees.

Richard S. Melton, formerly associate professor in the department of psychology at Southern Illinois University, has joined the staff of the professional examinations division of the Psychological Corporation, New York. He will participate in research and development programs for the Medical College Admissions Test and contribute to the continuing professional testing programs for schools of nursing, pharmacy, veterinary medicine, dental hygiene, and others.

Thomas L. Kimball of Denver, Colo., has been named executive director of the National Wildlife Federation, Washington, D.C. He succeeds **Ernest F. Swift**, who resigned in March because of ill health. Swift, who resides in Rice Lake, Wis., continues to serve the federation as a conservation adviser.

Otto Glasser, biophysicist at the Cleveland Clinic, Cleveland, Ohio, was recently awarded the Commander's Cross of the Order of Merit of the Federal Republic of Germany in recognition of his contributions to radiology and his work on the life of W. C. Röntgen.

Earl Ubell, science editor of the New York *Herald Tribune* and syndicated science columnist, has taken office as president of the National Association of Science Writers for 1960–61. Other new officers are vice president **Victor Cohn**, science writer for the Minneapolis *Tribune*, and secretary-treasurer **Nate Haseltine**, medical and science editor of the Washington *Post*.

Continuing the custom of recent years, the chemistry department at the University of California, Los Angeles, will have two new visiting faculty members from overseas in 1960–61, both in organic chemistry: first semester, **Richard C. Cookson**, University of Southampton, England; second semester, **C. A. Bunton**, University College, London.

Other faculty changes in the department are as follows:

Mark Cher has resigned to accept appointment as senior chemist with Atomics International in Canoga Park, Calif., where he will establish a photochemistry laboratory.

Hosmer W. Stone, for 39 years a member of the chemistry staff, retired on 30 June, with the rank of professor emeritus.

Ralph A. James, former associate professor, is now assistant chemical director at the Lawrence Laboratory, University of California, Livermore.

New officers of the American Physiological Society for the term beginning 1 July 1960 include the following: president, **J. H. Comroe, Jr.**, University of California Medical Center, San Francisco; president-elect, **Horace Davenport**, University of Michigan School of Medicine; and past-president, **Robert Pitts**, Cornell University Medical College.

Recent Deaths

Walter J. Baeza, St. Petersburg, Fla.; 60; chemical engineer and president of the Industrial Research Company, St. Petersburg; specialist in the chemistry of metals; 16 Aug.

Du Bois Eastman, Whittier, Calif.; 54; chemical engineer and director of the Montebello, Calif., research laboratory of Texaco, Inc.; 12 Aug.

Kurt Felix, Frankfurt am Main-Niederrad, Germany; 73; emeritus professor of physiological chemistry at the University of Frankfurt; 2 Aug.

John Garb, New York, N.Y.; 70; associate clinical professor of dermatology at the New York University Medical Center; 13 Aug.

Heinz Gartmann, Stockholm, Sweden; 43; West German rocket engineer who was one of the founders of the International Astronautical Federation; author of several books on space, three of which have been published in English translation; 18 Aug.

Frank W. Lathrop, Falmouth, Me.; 71; retired specialist in agricultural education; taught agriculture in New York and Minnesota and was a member of the staff of the U.S. Office of Education for 18 years; 19 Aug.

C. E. Kenneth Mees, Honolulu, Hawaii; 78; retired vice-president for research of Eastman Kodak Company; headed Eastman Kodak's research for nearly 44 years following his organization of the company's Kodak Research Laboratories in Rochester, N.Y., in 1912; 15 Aug.

Maud L. Menten, Windsor, Ont.; 81; retired as professor of pathology at the University of Pittsburgh in 1950; specialist in cancer research and experimental pathology; 17 July.

Harry M. Richter, Chicago, Ill.; 88; professor emeritus of surgery at Northwestern University Medical School; specialist in thyroid surgery and surgery in newborn infants; a founder of the American College of Surgeons; 18 Aug.

Carl K. Seyfert, Nashville, Tenn.; 49; professor of physics and astronomy at Vanderbilt University; director of the Dyer Observatory and a director of the Green Bank Observatory; 13 June.

David B. Steinman, New York, N.Y.; 73; internationally known engineer; designed more than 400 bridges, including the Triborough and Henry Hudson bridges in New York and the Mackinac Straits bridge in Michigan; 21 Aug.

James W. Woodard, Philadelphia, Pa.; 68; retired professor of sociology at Temple University; 14 Aug.